SONY

3-753-099-21(2)

Integrated Stereo Amplifier

TA-AV411

Operating Instructions

Before operating the unit, please read this manual thoroughly and retain it for future reference.

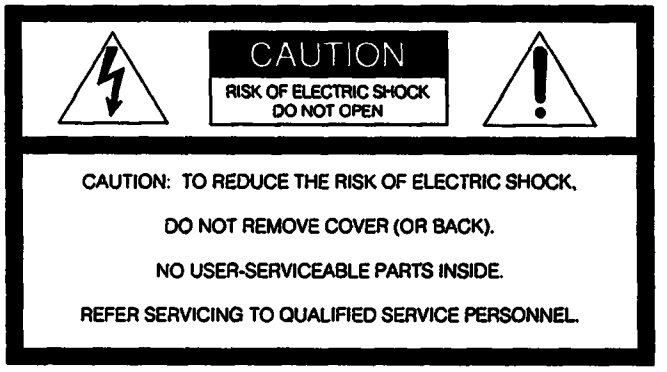
Owner's Record

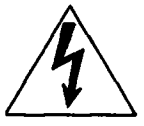
The model and serial numbers are located at the rear. Record the serial number in the space provided below. Refer to them whenever you call upon your Sony dealer regarding this product.

Model No. TA-AV411 Serial No._____

WARNING

To prevent fire or shock hazard, do not expose the unit to rain or moisture.


CAUTION
RISK OF ELECTRIC SHOCK
DO NOT OPEN
CAUTION: TO REDUCE THE RISK OF ELECTRIC SHOCK,
DO NOT REMOVE COVER (OR BACK).
NO USER-SERVICEABLE PARTS INSIDE.
REFER SERVICING TO QUALIFIED SERVICE PERSONNEL.



This symbol is intended to alert the user to the presence of uninsulated "dangerous voltage" within the product's enclosure that may be of sufficient magnitude to constitute a risk of electric shock to persons.

This symbol is intended to alert the user to the presence of important operating and maintenance (servicing) instructions in the literature accompanying the appliance.

* The graphical symbols are on the rear enclosure.

Precautions

On safety

- Operate the unit only on 120 V AC, 60 Hz.
- Should any solid object or liquid fall into the unit, unplug it and have it checked by qualified personnel before operating it any further.
- Unplug the unit from the wall outlet if it is not to be used for an extended period of time. To disconnect the cord, pull it out by grasping the plug. Never pull the cord itself.

On installation

- Place the unit on a level surface.
- Do not install the unit in a location near heat sources such as radiators or air ducts, or in a place subject to direct sunlight, excessive dust, mechanical vibration or shock.
- Good air circulation is essential to prevent internal heat buildup in the unit. Place the unit in a location with adequate air circulation. Do not place the unit on a soft surface, such as a rug that would block the ventilation holes on the bottom.
- Do not place anything on top of the cabinet. The top ventilation holes must be unobstructed for the proper operation of the unit and to prolong the life of its components.

On cleaning the cabinet

Clean the cabinet, panel and controls with a soft cloth lightly moistened with mild detergent solution. Do not use any type of abrasive pad, scouring powder or solvent such as alcohol or benzine.

On repacking

Do not throw away the carton and the packing material. It makes an ideal container to transport the unit in.

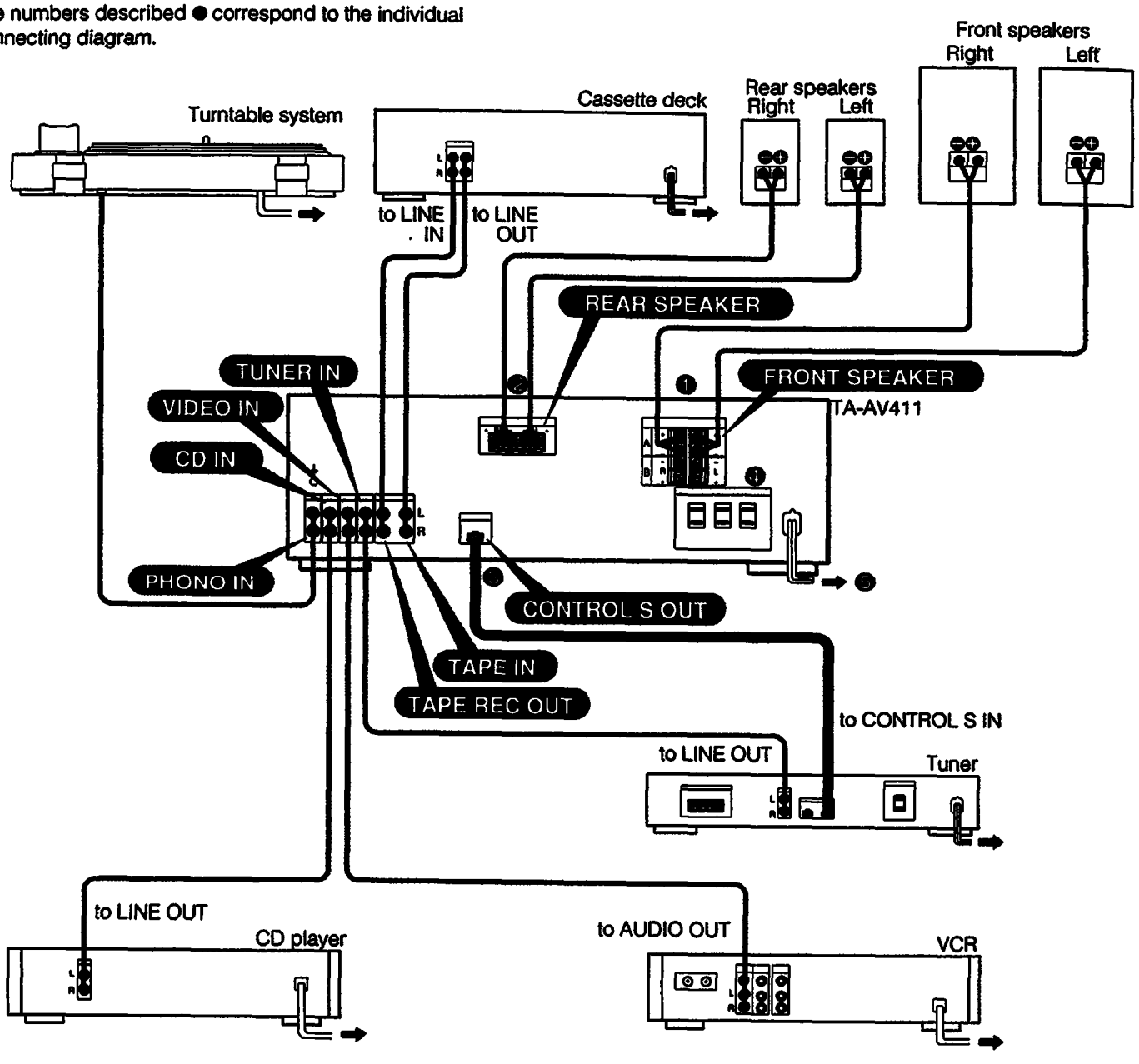
If you have any question or problem concerning your unit, please consult your nearest Sony dealer.

For detailed precautions, see the leaflet "IMPORTANT SAFEGUARD".

Connections

- Connect the AC power cord last. Make sure power is off.
- Cord plugs and jacks are color coded. Red plugs and jacks are for right channel (R) and white ones for the left channel (L).
- The cable connectors should be fully inserted into the jacks. A loose connection may cause hum and noise.
- The + and – cords of the speaker systems should be correctly connected to the + and – terminals of the amplifier respectively.

The numbers described ● correspond to the individual connecting diagram.

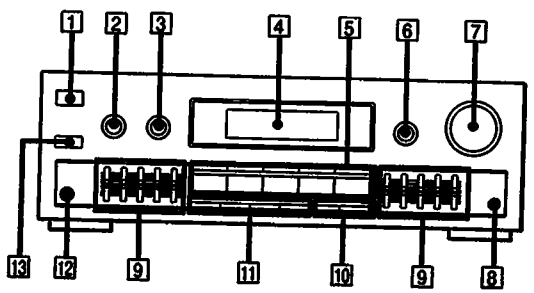


Note on speaker impedance and power capacity
This amplifier is designed to work best with speakers of nominal impedance from 8 to 16 ohms. Be sure to use a speaker system with adequate power handling capabilities.

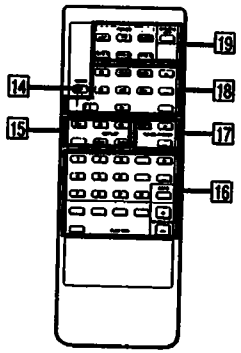
To connect a video tape recorder
Use the following cables.

For stereo video tape recorder	
RK-C74	phono plug x 2 – phono plug x 2
For monaural video tape recorder	
RK-G105	mini plug x 1 – phono plug x 2
RK-C72	phono plug x 1 – phono plug x 2

Location of Controls



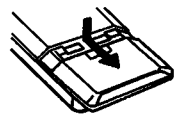
TA-AV411



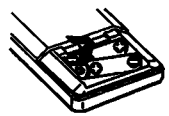
RM-U212

Installing Batteries

1



2 Two size-AA (R6) batteries



Amplifier

1 SYSTEM POWER switch
When the SYSTEM POWER switch is turned ON, the settings on the display panel are automatically reset the original setting.

2 SPEAKERS selector

3 INPUT BALANCE control

4 Display window

5 Function selectors

6 BALANCE control

7 MASTER VOLUME control

8 DBFB switch

9 Graphic equalizer controls

10 REAR LEVEL buttons

11 SURROUND MODE selectors

12 HEADPHONES jack

13 Remote control sensor

Remote Commander

14 MODE selector
Selects the function mode on the remote commander.
1: To select the function indicated in light gray such as DECK, DAT, CD player and surround mode of amplifier.
2: To select the functions indicated in blue such as VTR, LDP (Laser disc player) and TV.

15 CDP/LDP control section
The combined CD/LD player can be controlled with LDP position.
►: Play
II: Pause
■: Stop
D (disc) SKIP: Disc skip (for a CD player equipped with a multi-disc changer)
◄◄/►►: Manual search (only for LD player)
I◄◄/►►I: Locates a desired selection.

16 Amplifier/TV section
TV/VIDEO button: Selects the input signal of the TV. (for TV)
Program number (1 to 0) and ENTER buttons. Select the channel. (for TV)
SURROUND mode selectors (for the amplifier)
ON/OFF: Turns on/off the surround mode.
MODE: Selects the surround mode.
FUNCTION selectors: Select an input source of the amplifier. (for the amplifier)
REAR VOL /TV VOL +/– buttons: Control the volume of rear speakers (surround level) or TV.
DBFB button: Turns on/off the DBFB (Dynamic Bass Feed Back) (for the amplifier)
MASTER VOL +/– buttons: Control the amplifier volume. (for the amplifier)

17 Tuner/TV section
SHIFT and TUNER PRESET/ TV CH (channel) +/– buttons. Select a preset channel of the tuner or a channel of the TV.

18 Tape deck/VCR control section
DECK/VTR selector
DECK A,B, and DAT: Selects A,B, or DAT deck.
VTR 1, 2, and 3. Selects VCR type.
(1: Betamax VCRs, 2: 8 mm VCRs, 3: VHS VCRs)
II: Pause
■: Stop
◄◄/►►: Fast winding
◄/►: Play
● (REC): Recording
ANT (antenna) TV/VTR button: Selects the output signal from the antenna terminal on the VCR, either a TV signal or VCR programs.
VTR CH (channel) +/– buttons. Select channel on the VCR

19 Power control section
SYSTEM OFF button: Turns off the power of the whole system. LDP, VTR, TV, and AUDIO
LDP/VTR1/VTR2/VTR3/TV/AUDIO POWER buttons: Control the power of each unit. (The VTR button can be operative only when TAPE/VTR selector is set to VTR)

Battery life
About half a year of normal operation can be expected when using the Sony SUM-3 (NS) batteries. When the batteries are exhausted, the remote commander can no longer operate the unit. If this happens, replace both batteries with new ones.

To avoid battery leakage
When the commander is not be used for a long time, remove the batteries to avoid damage caused by battery leakage and corrosion.

Adjusting the Audio

The following operations apply only to reproduced sound.

Volume Adjustment

To increase the sound level, turn the MASTER VOLUME clockwise.
To decrease it , turn the control counterclockwise

Sound Quality Adjustment

To reinforce bass
Press the DBFB (Dynamic Bass Feedback) switch to ON. The lower the sound level is, the more the bass is emphasized.

To adjust tone quality
Adjust the 5-band stereo graphic equalizer controls according to:
- Personal preference
- The room acoustics. For instance, playback in a room with padded walls or furniture will probably sound better with the high frequencies boosted.
- Program quality. If reproduction contains hiss, cutting the higher frequencies will improve playback.

Function of the graphic equalizer controls
100 Hz: Boosts or cuts bass.
330 Hz: Adjusts the power, spaciousness and warmth of the sound.
1 kHz: Provides more presence for vocals.
3.3 kHz: Boosts a brighter sound or reduces stridency
10 kHz: Highlights the delicate quality of instrumental sound.

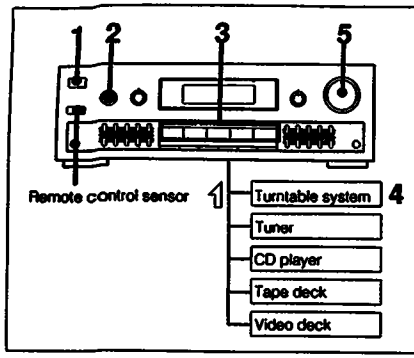
Balance Adjustment

To change relative strength of the right and left speaker outputs, adjust the BALANCE control

For personal listening
Connect headphone to the HEADPHONES jack.

If howling occurs while listening to a record
Switch off DBFB. Then turn down the volume and slide down 100 Hz controls until howling stops. Howling occurs when the vibrations of the boosted bass are picked up by the stylus, and reproduced once again.

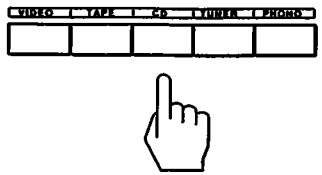
Listening to a Program Source



1

2 Select the speaker system

3 Select the program source



4 Play the program source

5 Adjust the volume level

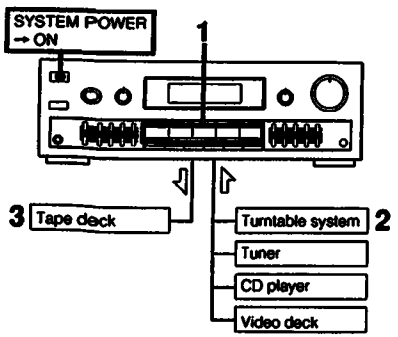
Selecting the speaker system
To drive speaker system A: Set SPEAKERS to "A".
To drive speaker system B: Set SPEAKERS to "B".
To drive both speakers: Set SPEAKERS to "A + B".
For headphone listening only: Set SPEAKERS to "OFF".

Notes
- When SPEAKERS is set to "A + B", two pairs of speaker systems must be connected. Otherwise, no sound can be heard.
- The sound of rear (surround) speakers are not heard from the headphone.

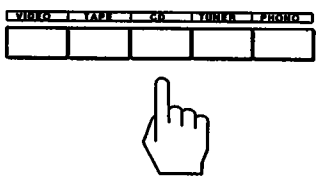
Selecting the program source
For a record program, press PHONO
For a tuner program, press TUNER
For a CD program, press CD.
For a tape program, press TAPE.
For a video sound program, press VIDEO.

Recording

You can record any program source using a tape deck connected to the TAPE jacks.
The BALANCE, VOLUME, GRAPHIC EQUALIZER controls and the DBFB switch have no effect on recording.



1 Select the program source other than TAPE

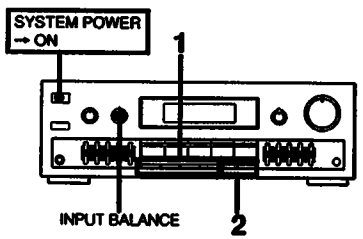


2 Play the program source

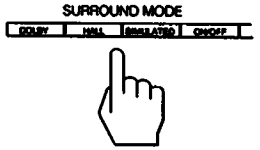
3 Set the tape deck in the recording mode.

Enjoying Surround Sound

The surround sound will be effective when surround speakers (optional) are connected to the REAR SPEAKER terminals on the rear panel.

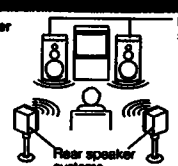


1 Select the surround mode



2 To adjust the rear sound level.

Location of the rear speaker systems



Selecting surround modes
DOLBY* (Dolby Surround)
Expands sound just like listening to it in a movie theater.
HALL (Hall Surround)
Provides reverberation effect that is produced in a concert hall.
SIMULATED (Simulated Surround)
Gives a simulate stereo effect to monaural sound.
ON/OFF
Turns on and off the surround mode.

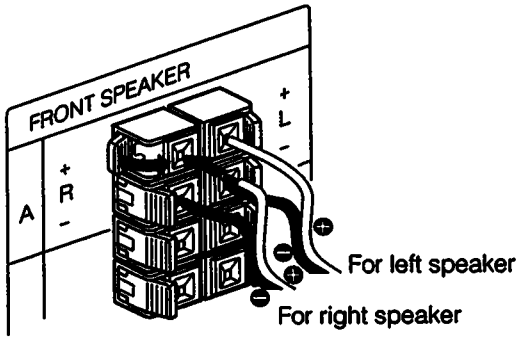
Note
No sound will be heard from the surround speakers, unless one of the Surround modes is selected.

Adjusting the INPUT BALANCE control
In the DOLBY SURROUND mode adjust this control so that the (audio) volume of the surround speaker is minimized during the scene of conversation (where the sound is monaural).

* Manufactured under license from Dolby Laboratories Licensing Corporation. Additionally licensed under one or more of the following patents: U.S. numbers 3,632,886, 3,746,792 and 3,959,590, Canadian numbers 1,004,603 and 1,037,877.
"DOLBY" and the double-D symbol ⅅ are trademarks of Dolby Laboratories Licensing Corporation.

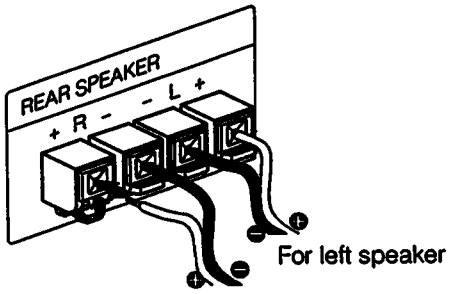
❶ Front speakers

You can connect two pairs of speaker systems: system A and system B.
They can be selected individually or simultaneously with the selector on the front panel.



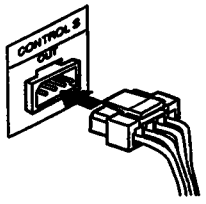
❷ Rear speakers

Connect a pair of rear speaker systems for enjoying surround sound.

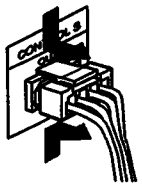


❸ Flat remote control cord (not supplied)

Connect to the CONTROL S IN jack of other Sony equipment with the flat remote control cord for whole audio system remote control.



Push in until it clicks.



To disconnect.

❹ AC OUTLETs (SWITCHED)

Use these to power audio components whose power consumption is less than the wattage indicated on the AC outlets.
These outlets are controlled by the POWER switch.

CAUTION
Do not connect any electrical home appliances such as an electric iron, fan, TV or other high wattage equipment to these AC outlets.

❺ Power cord

Connect to a wall outlet.

Troubleshooting

Before going through the check list below, first refer back to the connection and operating procedures.
Should any problem persist after you have made these checks, consult your nearest Sony dealer.

General	Remedy
No audio.	• Check the power cord connection. • Check the SPEAKERS selector setting. • Check the connections. • Check the setting of the function selector. • Check the speaker terminal connection and the speaker cord for a short.
No audio from one channel.	• Adjust the BALANCE control. • Check the speaker cord or connecting cord connection.
Lack of bass sound or obscure instrument position.	• Check the connection between the amplifier and speakers.
Severe hum or noise when using the turntable.	• Ground the turntable system. • Fully insert the plug of the connecting cord. • Disconnect the ground wire of the turntable from the terminal when using an MM cartridge with a ground piece.
Noise when TV is turned on.	• Move the TV away from the audio system.
Switching on DBFB does not affect the sound.	• DBFB reinforces only low frequencies.

Specifications

AUDIO POWER SPECIFICATIONS
POWER OUTPUT AND TOTAL HARMONIC DISTORTION:
With 8-ohm loads, both channels driven, from 40 - 20,000 Hz; rated 135 watts per channel minimum RMS power, with less than 0.9% total harmonic distortion from 250 milliwatts to rated output.

Amplifier section

Power bandwidth (IHF) 30 Hz – 30 kHz (8 ohms)
Dynamic headroom 1.7 dB ('78 IHF)
Harmonic distortion Less than 0.9% at rated output (Surround OFF)
Frequency response PHONO: RIAA equalization curve
CD, VIDEO, TUNER, TAPE: 30 Hz – 30 kHz ±3dB
Surround output 15 W + 15 W (8 ohms)
Damping factor 27 (8 ohms, 1 kHz)

Input

Input jack	Jack type	Sensitivity	Impedance	S/N (weighting network, input level)
PHONO	Phono	3.0 mV	50 kohms	71 dB 75 dB* (A, 3.0 mV)
CD,VIDEO, TUNER, TAPE	Phono	250 mV	50 kohms	92 dB 83 dB* (A, 250 mV)

*'78 IHF

Output

TAPE (REC OUT)	Phono jacks	Voltage 150 mV Impedance 1 kohm
SPEAKERS	–	Accepts speakers of 8 – 16 ohms
HEADPHONES	Stereo phone jack	Accepts low and high impedance headphones.

GRAPHIC EQUALIZER controls
Boost/Cut range:
±8 dB (100 Hz, 330 Hz, 1 kHz, 3.3 kHz)
±6 dB (10 kHz)

General

Power requirements 120 V AC, 60 Hz
Power consumption 250 W
AC outlets 3 switched, 120 W/1 A max.
Dimensions Approx. 430 x 145 x 360 mm (w/h/d) (17 x 5⅝ x 14⅛ inches)
Weight Approx. 9.9 kg (21 lb 14 oz)
Accessories supplied
Remote Commander RM-U212 (1)
Sony batteries SUM 3(NS) (2)

Design and specifications subject to change without notice.

Sony Corporation Printed in Malaysia